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JPRS 81157

29 JUNE 1982

# China Report

PLANT AND INSTALLATION DATA

No. 36

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## I. METALLURGICAL INDUSTRY

Item: Yunnan Tin Industry Corporation  
[0061 0589 6932 2814 0361 0674]

Location: Kunming, Yunnan, PRC

Data: This corporation's Refinery No 1 has modified its product composition to turn out products that have a ready market. In 1981, its new products have earned for the refinery 4.21 million yuan in profit, accounting for 60 percent of the corporation's total profit. During the first quarter of this year, sale of new products has earned for the refinery a profit of 1.17 million yuan, representing 41.4 percent of the total profit. In the past 2 years, the refinery has produced "Special Zero Tin," sodium stannate, (crystal sodium stannate), tin-base alloy, lead-base alloy, white arsenic and tin welding rods, making contributions to the developments of the light, textile, electronic and chemical industries.

Source: Kunming YUNNAN RIBAO in Chinese 26 Apr 82 p 2

Item: Guangzhou Copper Materials Plant  
[1639 1558 6894 2624 1681]

Location: Guangzhou, Guangdong, PRC

Data: Last year and through the first quarter of this year, this plant turned over more than 3 million yuan in profits and taxes to the state. The plant has recently both strengthened its economic accounting and lowered its production costs, thereby raising its revenues. When the price of zinc ingots--the principal raw material used in making copper products--went up last year, the plant bought cheaper zinc in order to guarantee production. During that time, it purchased over 300,000 metric tons of the cheaper zinc, saving more than 144,000 yuan. The plant, in strict compliance with government regulations, turned over 2.8 million yuan in profits and taxes to state authorities last year. Seventy thousand yuan of this amount was in excess of its profit delivery plan.

Source: Guangzhou GUANGZHOU RIBAO in Chinese 26 Apr 82 p 2

Item: Baoji Nonferrous Metal Processing Plant  
[1405 7741 2589 5351 6855 1466 0502 1562 1681]

Location: Baoji, Shaanxi, PRC

Data: This plant's export of titanium alloy sheet metal to the United States Nickel Alloy Corporation has been shipped to the United States. It is the first time the PRC has exported titanium processing materials. The titanium alloy ingot castings sold to the United States in 1980 by the plant met with favorable comment there and have since captured a large market overseas. This year the plant has had business dealings with over 80 foreign customers in the United States, England, West Germany, Sweden, Finland, Romania, Hong Kong and elsewhere. Recently, the plant has also sold titanium alloy sheets and titanium bars to France.

Source: Xi'an SHAANXI RIBAO in Chinese 25 Apr 82 p 1

Item: Fenghuangshan Copper Mine  
[7685 0420 1472 6894 4349]

Location: Anhui Province, PRC

Data: This mine, operated by the Tongling Nonferrous Metals Corporation, has completed a project to exploit in depth its main body on 15 March. Its 1982 copper output is expected to exceed that of 1981 by 26 percent, and balanced production may continue for 10 years. This is the first nonferrous metal mine in the country to introduce advanced equipment from abroad. The corporation allocated two-thirds of its "adjusted" capital fund to carry out this deep exploitation project.

Source: Beijing BEIJING RIBAO in Chinese 7 May 82 p 2

Item: Lanzhou Steel Mill  
[5695 1558 6921 0617]

Location: Lanzhou, Gansu, PRC

Data: By the end of March this year, this plant, which primarily produces wires, small-sized steel rounds, and threaded steel, has signed contracts with 130 factories, mines and enterprises, totaling 50,700 metric tons of steel products and accounting for 85 percent of its annual output plan of 60,000 metric tons.

Source: Lanzhou GANSU RIBAO in Chinese 25 Apr 82 p 1

Item: Hongling Tungsten Mine  
[4767 1545 7005 4349]

Location: Guangdong Province, PRC

Data: One of Guangdong's major tungsten producers, this mine was seemingly "running dry" in the mid-sixties. Following many years of hard work, the No 937 Geological Team of the Guangdong Metallurgical Geology Prospecting Company found out that the mine still has rich tungsten, molybdenum, bismuth and copper ore deposits. On the basis of this mine's current production scale, there are still more than 20 years of mining operations left here.

Source: Beijing GONGREN RIBAO in Chinese 12 Apr 82 p 1

Item: Qiqihar Steel Mill  
[7871 7871 0761 3643 6921 0617]

Location: Qiqihar City, Heilongjiang, PRC

Data: This mill recently signed a contract with a French company to export to France 442 metric tons of large-sized steel forgings.

Source: Harbin HEILONGJIANG RIBAO in Chinese 15 May 82 p 1

Item: Benxi Iron and Steel Company  
[2609 3305 6921 6993 0361 0674]

Location: Benxi, Liaoning, PRC

Data: A large iron mine with an ore reserve of 150 million metric tons has recently been discovered northeast of Anshan, Liaoning Province. Primarily a magnet mine, the new mine will provide another reserve base for this company.

Source: Beijing GONGREN RIBAO in Chinese 13 Apr 82 p 1

Item: Huma Gold Mining Bureau  
[0729 7456 6855 4349 1444]

Location: Northern Heilongjiang Province, PRC

Data: This bureau's gold mining vessel started operation on 1 May. Up to now, all gold mining vessels under various gold mining bureaus in Heilongjiang have started production 10 days ahead of schedule this year. Heilongjiang's gold output target for 1982 calls for an increase of 51 percent over the preceding year. The Heihe, Huma and Huanan Gold Mining Bureaus have instituted a system of economic responsibility. The Huanan Mining Bureau, which incurred heavy losses in 1981, has also adopted a floating wage system.

Source: Harbin HEILONGJIANG RIBAO in Chinese 8 May 82 p 1

Item: Tongguan Gold Mine  
[8690 7070 6855 4349]

Location: Tongguan, Shaanxi, PRC

Data: The Dongtong Valley mining zone operated by this mine surpassed its production quota established for the first quarter of 1982. By 25 February it had already produced 663 liang (Chinese ounce) of gold.

Source: Xi'an SHAANXI RIBAO in Chinese 17 Mar 82 p 1

## II. TRANSPORTATION EQUIPMENT INDUSTRY

Item: Shanghai Motor Vehicle Plant  
[0006 3189 3086 6508 0617]

Location: Shanghai, PRC

Data: Despite a shortage of capital funds and out-dated equipment, this plant has taken steps to improve the quality of its "Shanghai" brand sedans. It has reduced the fuel consumption from 12 to 9.4 liters per 100 li by replacing the double-barrel carburetor with a single-barrel carburetor. The front seat is divided, thereby reducing the body weight by 8 kilograms. An air-conditioner has been added. A centrifugal blower, instead of an axial flow blower, has been installed in the heating system. The weight of the sedan can be reduced by an additional 20 kilograms by using certain materials for the spare parts. Beginning January 1982, the price of the sedan has been lowered from 25,000 to 20,000 yuan, a 20 percent reduction.

Source: Beijing RENMIN RIBAO in Chinese 8 May 82 p 1

Item: Dalian Locomotive and Rolling Stock Plant  
[1129 6647 2623 6503 6503 6538 0617]

Location: Dalian, Liaoning, PRC

Data: For the past 10 years, this plant's Machinery Workshop No 2 has been persistently carrying out technical reforms and has achieved remarkable results. To date, this workshop has designed and built 56 pieces of large and special equipment, improved 33 pieces of old equipment, and modified and manufactured 948 sets of technical equipment. As of the end of 1981, the workshop employed 513 employees and workers.

Source: Beijing GONGREN RIBAO in Chinese 19 Mar 82 p 1



Item: Dalian Passenger Vehicle Plant  
[2192 6647 1356 6508 0617]

Location: Dalian, Liaoning, PRC

Data: Recently this plant has successfully trial built a new-type passenger-carrying motor vehicle--JT663. The vehicle has wide view and has four luggage compartments located in the aprons outside the vehicle body. It is also equipped with defroster, radio receiver and heater. Mass production of this passenger motor vehicle (bus) is scheduled for 1982.

Source: Shenyang LIAONING RIBAO in Chinese 7 Apr 82 p 2

Item: Zhangzi Dao Fishing Port  
[3742 1311 1497 3342 3263]

Location: Changhai County, Liaoning, PRC

Data: Construction of this commune-run fishing port which covers an area of 170,000 square meters has been completed. The shipyard and two cold storage houses with a 2,000-metric ton capacity have been successively put into operation. Preparations for the construction of a fish meal plant and a cannery are under way. The fishing port and nearly 200 fishing boats with 20 to 600 horsepower have withstood a storm of 10 grades.

Source: Shenyang LIAONING RIBAO in Chinese 8 Apr 82 p 2

Item: Zhenjiang Anchor Chain Plant  
[6966 3068 6931 6969 0617]

Location: Zhenjiang, Jiangsu, PRC

Data: Official approval has been given to the super high-strength anchor chains produced by this plant, by the Register of Shipping of the PRC and Germanischer Lloyd of the Federal Republic of Germany. The A3-class chains, used on ships and oil drilling rigs, are produced in only a few countries. The plant produces the chains on the basis of their production of A2-class chains, which were approved in July 1981 by Germanischer Lloyd. The new chains will be used in Chinese-built ships for export.

Source: Beijing XINHUA in English 0228 GMT 25 Apr 82 OW

Item: China Aviation Equipment Corporation  
[0022 0948 5300 4500 6080 0271 0361 0674]

Location: Shenyang, Liaoning, PRC

Data: The Shenyang branch of this corporation opened business on 1 May here. This branch will market aviation equipment for civilian use. According to statistics, aviation industrial enterprises throughout the country have produced 1,500 varieties of civilian-use products, of which some 40 varieties have been produced in Liaoning Province.

Source: Shenyang Liaoning Provincial Service in Mandarin 1100 GMT 2 May 82 SK

### III. ELECTRONIC AND PRECISION EQUIPMENT INDUSTRIES

Item: Beijing Semi-conductor Materials Plant  
[0554 0079 0584 1418 7555 2624 2436 0617]

Location: Beijing, PRC

Data: Covering only 7 mu of land and employing only 170 people, this plant has done remarkably well in achieving economic results. Compared to 1979, its output volume increased 300 percent; amount of profits delivered to the state rose 180 percent; and production cost dropped 28 percent in 1981. Its principal product is monocrystalline germanium which is inseparable from laser, optical communications, semiconductor television sets, and radio receiving sets.

Source: Beijing BEIJING RIBAO in Chinese 31 Mar 82 p 1

Item: Shenyang City Analytical Instruments and Meters Plant  
[3088 7122 1579 2649 0308 5903 0617]

Location: Shenyang, Liaoning, PRC

Data: In cooperation with the Northeast Engineering Institute, this plant has successfully built a JY-101 laser supersonic diffraction instrument for instructional purpose at institutions of higher learning. The department concerned held a meeting 28 April to appraise the instrument which measures the supersonic propagation velocity in liquids and makes all kinds of diffraction tests.

Source: Shenyang LIAONING RIBAO in Chinese 1 May 82 p 2

Item: Shanghai Plant No 101  
[0006 3189 0001 7190 0617]

Location: Shanghai, PRC

Data: The 10 new continuous radio receiver production lines installed in the No 2 workshop of this plant were officially put into operation at the end of March 1982. After 3 months of trial operations, these new production lines showed an increase of 5.15 percent in labor productivity and increase of 13.5 percent in radio receiver output. Return of the 600,000 yuan investment is expected to be realized in 1 year.

Source: Beijing GONGREN RIBAO in Chinese 17 Apr 82 p 1

Item: Institute No 608  
[0362 7190 0360 4282 4496 7108]

Location: Beijing, PRC

Data: Subordinate to the Third Ministry of Machine-Building Industry, this institute has gradually instituted a system of economic responsibility in scientific research projects and has increased its economic results. Since the beginning of 1981, it has completed 37 S/T projects, 8 of which have won prizes from the Third Ministry of Machine-Building Industry. The results of 28 successful projects are being popularized. The institute employs 500 engineers and assistant engineers.

Source: Beijing GUANGMING RIBAO in Chinese 4 May 82 p 1

Item: Shanghai Quartz Glass Plant  
[0006 3189 4258 5391 3788 3863 0617]

Location: Shanghai, PRC

Data: Scientists in Shanghai have successfully developed a new kind of fiber optic, called a "monomode." The fiber, 1/10th of thickness of a human hair, is used to transmit various kinds of information with the help of a laser, and can simultaneously carry over 1 million-channel telephone circuits. Its advantages include greater information carrying capacity and longer transmission distance, compared with the multimode fiber which China developed several years ago. The fiber can also be used to make fiber optic gyros and sensors. The monomode fiber was developed by the scientific workers at Shanghai University of Science and Technology and this plant after 2 years' efforts. Professor Huang Hongjia, vice president of the university, who contributed to the fiber research, said that the application of monomode fiber opens a broad horizon for modernizing the country's telecommunications, and also places China in the front rank in world light technology research.

Source: Beijing XINHUA in English 0731 GMT 7 Jun 82 OW

Item: Changchun Institute of Precision Optical Machinery  
[7022 2504 4737 1378 0342 1331 2623 2750 4282 4496 7108]

Location: Changchun, Jilin, PRC

Data: This institute under the Chinese Academy of Sciences has developed two kinds of ring dye-lasers, an advanced laser instrument used in the research of laser spectroscopy and laser chemistry, according to Cheng Shufeng, an official of the academy's Division of Technological Sciences. The newly developed tunable single frequency continuous wave ring dye-laser and broad tunable spectral range continuous wave ring dye-laser have been put into practical use, the official said. Since they have high spectral resolving power and large power output, the dye-lasers are much appreciated by the scientists, he said. Cheng said China's other achievement in laser technology is that the Changchun Institute of Applied Chemistry under the Chinese Academy of Sciences has succeeded in applying a laser to opto-acoustic spectral research and developed a laser opto-acoustic spectroscopy instrument.

Source: Beijing XINHUA in English 0729 GMT 29 Apr 82 OW

#### IV. CHEMICAL INDUSTRY

Item: Mudanjiang Chemical Plant No 1  
[3665 0030 3068 0553 1562 0001 1681]

Location: Mudanjiang, Heilongjiang, PRC

Data: By emphasizing energy conservation, this plant, Heilongjiang's largest producer of calcium carbide, has lowered its production costs via a reduction in electric power consumption. From the beginning of 1982 through the first 10-day period of April, electric power consumption per ton of calcium carbide produced was 12 percent less than that of the same period last year. In the first quarter of 1982, production increased 67 percent, and by conserving 1.65 million kilowatt hours of electric power, the plant was able to reduce its production costs by 18 percent. As a result, the plant realized 268,000 yuan more in profits in the first quarter of 1982 than it had in the same period of the previous year.

Source: Harbin HEILONGJIANG RIBAO in Chinese 9 May 82 p 2

Item: Anshan Chemicals Plant No 2  
[7254 1472 0553 1562 0059 1681]

Location: Anshan, Liaoning, PRC

Data: A new power station fueled by carbon black tail gas has been put into operation at this plant. The addition of the power station will not only alleviate the plant's pollution problem, but also make it more self-sufficient in its fuel consumption. The power station will allow the plant an annual savings of 400,000 yuan.

Source: Shenyang LIAONING RIBAO in Chinese 9 May 82 p 1

Item: Shaoxing Chemical Fertilizer Plant  
[4801 5281 0553 5142 1681]

Location: Shaoxing, Zhejiang, PRC

Data: This plant has held the province's lead position in maintaining low production costs while attaining high profits for three consecutive years. Plant manager Tao Zhushen [7118 4554 6500] has been praised for his insistence on energy conservation and waste production. During the first quarter of 1982, the plant set new records, realizing 20.6 yuan in profit for every 100 yuan of output value. Its coal consumption for ammonia production was down 470 metric tons as compared with the same quarter last year.

Source: Hangzhou ZHEJIANG RIBAO in Chinese 21 Apr 82 p 1

Item: Guangzhou Nitrogenous Fertilizer Plant  
[1639 1558 8644 5142 1681]

Location: Guangdong, Guangzhou, PRC

Data: This plant has increased its production of chemical fertilizers. From January 1 through the middle of April, it manufactured 600 metric tons more of nitrogenous fertilizers than was stipulated in its production plan. It also produced 3,800 metric tons more of urea than had been expected, an increase of 16 percent over the same period last year.

Source: Guangdong GUANGZHOU RIBAO in Chinese 27 May 82 p 2

Item: Hexibao Nitrogenous Fertilizer Plant  
[3109 6007 1027 8644 5142 1681]

Location: Hexibao, Gansu, PRC

Data: From 1967 through 1969, this plant produced only 10,000 metric tons of synthetic ammonia per year. Its equipment was outdated, and its coal consumption and electric power consumption were very high. The plant relied on government subsidies in order to maintain production. By 1979 its products were unmarketable, and it was forced to halt production. After a 9-month reorganization, the plant reopened in March 1980. By placing a high priority on energy conservation, it reduced its coal consumption by 834 kilograms and its production costs by 15.6 percent by the end of 1980. In 1981, with subsidies issued by the province, the plant was able to realize 620,000 yuan in profits. During the first 50 days of 1982, the plant produced 207 metric tons of chemical fertilizer per day, 1.32 times the amount produced in the same period last year. Its total production of synthetic ammonia for the period was 2,705 metric tons. Its coal consumption per metric ton of ammonia produced was 2,041 kilograms, 11.26 percent below the standards set by the Ministry of Chemical Industry. Electric power consumption was also 8.55 percent below the set standards, at 1,326 kilowatts. Without provincial government subsidies, the plant realized 30,000 yuan in profits. Its 1982 synthetic ammonia production quota has been set at 16,000 metric tons.

Source: Lanzhou GANSU RIBAO in Chinese 17 Mar 82 p 1

Item: Benxi Chemical Fertilizer Plant  
[2609 3005 0553 5142 0617]

Location: Benxi, Liaoning, PRC

Data: During the 8 years since its inception, due to serious oil, steam, water, electric power leakages in production caused by "neglected" equipment that sorely needed repairs; this plant has incurred losses totaling 13.2 million yuan. After nearly 3 years of arduous work in stopping the "leaks," and meeting the state "no leakage" standards, it earned in 3 years' time 13.8 million yuan in profit.

Source: Shenyang LIAONING RIBAO in Chinese 16 May 82 p 1



Item: Harbin Consumer Chemicals Plant No 2  
[5756 1422 6333 2480 3938 0553 1331 1702 0617]

Location: Harbin, Heilongjiang, PRC

Data: In 1981, this plant registered an output value of 4.23 million yuan and a profit of 430,000 yuan, a thirteenfold increase and a forty-twofold increase over 1979. It paid the state 1.8 million yuan in taxes. The plant attributed its success to improving product quality and product variety and to developing medium- and high-grade products.

Source: Harbin HEILONGJIANG RIBAO in Chinese 9 Apr 82 p 2

Item: Guangzhou Petrochemical Plant  
[1684 1558 4258 1444 0553 1562 0617]

Location: Guangzhou, Guangdong, PRC

Data: From the beginning of 1981 to the end of March this year, this plant has completed 123 energy-saving projects, 65 items of which were for the refining system, saving 23,900 metric tons of fuel oil valued at 2.23 million yuan. The plant's refining facilities have a designed annual crude oil refining capacity of 2.5 million metric tons. Last year, the amount of crude oil allocated by the state was insufficient. For this reason, the plant had to rely largely on technical reforms and innovations to turn out more products and conserve energy for the state.

Source: Guangzhou GUANGZHOU RIBAO in Chinese 25 Apr 82 p 1

Item: Shanghai General Petrochemical Plant  
[0006 3189 4258 3111 0553 1562 4920 0617]

Location: Shanghai, PRC

Data: During the 4 years since its inception, this plant has recouped its capital outlay of 2.18 billion yuan. During the 4-year period, the output value and profit per metric ton of crude oil registered increases of 41.3 and 35.5 percent respectively.

Source: Harbin HEILONGJIANG RIBAO in Chinese 23 Apr 82 p 4

## V. FUEL AND POWER INDUSTRIES

Item: Henan Oilfield  
[3109 0589 1444 3944]

Location: Nanyang, Henan, PRC

Data: In recent years, a number of people have been arrested for stealing crude oil and supplies from this oilfield. The local authorities have taken effective measures to prevent such thefts and crimes and to maintain law and order there. Formerly known as the Nanyang Oilfield, this oilfield is spread out over five counties, including Tongbai and Nanyang counties, in Henan Province. It has an annual crude oil output of 2.3 million metric tons, ranking 7th among 16 oilfields in the country.

Source: Beijing RENMIN RIBAO in Chinese 22 Apr 82 p 1

Item: Jinzhou Petroleum Plant No 6  
[6930 1558 4258 1444 0362 0617]

Location: Jinzhou, Liaoning, PRC

Data: In 1981, this plant made a profit of 114 yuan on every metric ton of crude oil it processed. This is an increase of 84.2 percent over the national average of 61.86 yuan. The plant ranks first among the country's petroleum refineries in earnings. The amount of profits delivered to the state in 1 year by this plant are sufficient to build another refinery of the same scale. Its present annual production of isopropyl alcohol has reached 10,000 metric tons. Products extracted from petroleum liquefied gas alone in 1 year are worth 150 million yuan and can earn a profit of 50 million yuan.

Source: Shenyang LIAONING RIBAO in Chinese 21 Jan 82 p 2

Item: Beigang Coal Mine  
[0554 1511 3561 4349]

Location: Qitaihe City, Heilongjiang, PRC

Data: The opening ceremony of this coal mine, located near the Dongfeng Commune, was held on 20 April 1982. Covering an area of 12.5 square kilometers, it is the largest mine in the area. The mine has a reserve of 49 million metric tons. With coking coal as its primary product, it also produces gas coal, fat gas coal, and fat coking coal. The mine has a coal seam thickness of 22 meters. Employing the inclined shaft group exploration method, its design calls for nine pairs of coal shafts, with a total annual output of 450,000 metric tons.

Source: Harbin, HEILONGJIANG RIBAO in Chinese 21 Apr 82 p 1

Item: Huangkeng Coal Mine  
[7806 0977 3561 4349]

Location: Southeastern Longyan City, Fujian, PRC

Data: This mine, the largest county-operated coal mine in Fujian Province, officially put into operation a pair of coal shafts with an annual output capacity of 100,000 metric tons on 22 April 1982. The coal geological reserves are estimated to be more than 5 million metric tons. The coal mine is located 12 kilometers from the Longyan Railway Station.

Source: Fuzhou FUJIAN RIBAO in Chinese 25 Apr 82 p 1

Item: Xiaohengshan Mine  
[1420 1854 1472 4349]

Location: Jixi, Heilongjiang, PRC

Data: By 15 March, this coal mine, subordinate to the Jixi Mining Administrative Bureau, overfulfilled its first quarter 1982 output plan by 3,900 metric tons. It has turned over to the state 1.36 million yuan in profit, an increase of more than 1 million yuan as compared to the like 1981 period.

Source: Harbin HEILONGJIANG RIBAO in Chinese 21 May 82 p 1

Item: Hongqi Coal Mine  
[4767 2475 3561 4349]

Location: Guizhou, PRC

Data: This mine was commended for operating continuously for 1,000 days without a single mishap from 5 July 1979 to 1 April 1982. Two of its excavation teams have been carrying out mining operations for 13 years without an accident. Employing 1,000 employees and workers, the mine produced 511,000 metric tons of raw coal in 1,000 days.

Source: Beijing GONGREN RIBAO in Chinese 4 May 82 p 1

Item: Tongchuan Mining Administrative Bureau  
[6894 1557 4349 0523 1444]

Location: Tongchuan, Shaanxi, PRC

Data: This bureau has overfulfilled its first quarter 1982 output quota, producing 290,000 metric tons more than the comparable period of 1981. It has reduced its losses by 3 million yuan as a result.

Source: Xi'an SHAANXI RIBAO in Chinese 10 Apr 82 p 1

Item: Gaobeidian Power Station  
[7559 4301 1648 7193 4541]

Location: Hebei Province, PRC

Data: A large-size electric power-saving device known as "capacitor reactive compensation" began operation here at the end of September last year. Results of operations showed that this piece of equipment can save 5.3 million kWh of electricity annually and can effectively improve the quality of power supply. Designed and fitted by the Beijing Electrical Equipment Institute and the Beijing City Electrical Equipment Industry Corporation, it is operating as part of North China Power Grid.

Source: Harbin HEILONGJIANG RIBAO in Chinese 23 Apr 82 p 4

Item: Douhe Power Plant  
[7107 3109 7193 0617]

Location: Western bank of the Douhe Reservoir 20 kilometers from  
northwestern suburbs of Tangshan City, Hebei, PRC

Data: A large "mine mouth" power plant using the local Kailuan coal as fuel, this plant has an ultimate capacity of 1.55 million kilowatts and transmits electricity to Beijing, Tianjin and the Jidong Prefecture. This project will be completed in four stages. The first and second stages, consisting of 2 x 12.5, 2 x 250,000-kw generating units totaling 750,000 kilowatts, are currently in operation. The third and fourth stages, consisting of 2 x 20, 2 x 200,000-kw generating units totaling 800,000 kilowatts, are still under construction.

Source: Beijing DIANLI JISHU [ELECTRIC POWER] in Chinese No 5, 1982 p 22

Item: Liancheng Power Plant  
[6647 1004 7193 0617]

Location: Gansu, PRC

Data: This newly built large thermoelectric power station is an important load center in the northwestern section of the Lanzhou Power Grid. Its No 1 generating unit in the first-phase construction project, with a single-unit capacity of 100,000 kilowatts, recently joined the power grid. This will play a positive role in gradually achieving a balance between hydroelectric power and thermoelectric power production in Gansu. All the installations are machinery and equipment made in China, including a large 100,000-kw turbo-generator with inner water-cooled stator and rotor, a new completely suspended semi-open-air drum boiler, and a low power consumption and high safety factor booster station.

Source: Shenyang LIAONING RIBAO in Chinese 2 Feb 82 p 2

## VI. MACHINE-BUILDING INDUSTRY

Item: Jixi City Construction Machinery Plant  
[7741 6007 1579 1696 4591 1562 4453 2623 2750 1681]

Location: Jixi City, Heilongjiang, PRC

Data: This plant's profits for the first quarter of 1982 were four times more than its profits for the same period last year. Its total output value for the period increased 64 percent. The plant is one of 14 state-designated construction machinery enterprises, its principal product being the JG-250 concrete mixer. With the state's reorganization of the machine-building industry, the plant found that it could not sell its low quality products, and for a time it operated at a loss. Its recent recovery is attributed to improved quality and better plant management. Some 95 percent of the plant's machine processing components and 100 percent of the machines that have been spot-tested have met quality standards. Last September the plant was rated second in comparison with the other 14 state-designated enterprises. Currently, the concrete mixers it produces are being sold not only in Heilongjiang but also in Jilin, Zhejiang and other provinces. The 51 concrete mixers produced by the plant in the first quarter of 1982 have all been sold.

Source: Harbin HEILONGJIANG RIBAO in Chinese 17 May 82 p 2

Item: Chongqing Electrical Machinery Plant No 2  
[6850 1987 4574 0059 7193 2894 1681]

Location: Chongqing, Sichuan, PRC

Data: This plant's trial production of the YE-YZR250 electric motor, used for hoisting metals, has been successful. After passing industrial test runs under adverse conditions in a number of steel plants, the motor was approved by an appraisal committee set up by the First Ministry of Machine-Building. The motor has a high degree of standardization and its parts are interchangeable. When the YE-YZR250 motor and an earlier model were compared under similar power conditions, the new motor was found to be 40 percent more efficient, and very effective at conserving electricity. For example, a YE-YZR250 motor with an eight-pole[octode] 30 kilowatt specification can conserve 67 kilowatt hours of electricity in a 24-hour period.

Source: Beijing GONGREN RIBAO in Chinese 20 Apr 82 p 1



Item: Hanzhong Transformer Plant  
[3352 0022 6239 1090 0892 1681]

Location: Hanzhong, Shaanxi, PRC

Data: The mass production of two-stage vacuum oil purifiers, which was started last year by this plant, has already saved the state 1.20 million U.S. dollars in foreign exchange. The plant manufactured the machines in cooperation with the Seventh Design Institute of the First Ministry of Machine-Building and other units. The two-stage vacuum oil purifier is an essential piece of equipment used specifically to purify the insulation oil used in piezoelectric tools. In the past, when this equipment had to be imported, each piece cost 200,000 U.S. dollars.

Source: Beijing GONGREN RIBAO in Chinese 20 Apr 82 p 1

Item: Shanghai Petroleum Machinery Plant No 1  
[0006 3189 4574 0001 4258 3111 2623 2750 1681]

Location: Shanghai, PRC

Data: The XHP-3 "four-in-one" gear wheel drill bit manufactured by this plant is being exported to the United States. The plant successfully trial-manufactured the drill bit in 1979. Last year during Sino-Japanese cooperation on the Bohai No 6 Drill Rig, the XHP-3 was tested against the American Hughes Corporation's J33 drill bit. Japanese specialists found that within a 30-hour period, the XHP-3 drilled 33 meters, while the J33 drill bit could only drill 26 meters.

Source: Shanghai JIEFANG RIBAO in Chinese 25 Apr 82 p 1

Item: Jiannan Machinery Plant  
[1696 0589 2623 2750 1681]

Location: Jiannan, Hubei, PRC

Data: This plant has successfully trial-manufactured a new HL220-WJ-42 hydraulic turbine. The turbine is the first new product in a series of nationally unified designs. It has been tested for 3 months at the Yanzidong Power Station in Naji County. The turbine was found to be more efficient than other locally-produced turbines, and to be above national technology and quality standards. With a water head of 20 to 50 meters, it has a flow capacity of 0.87 to 1.41 cubic meters/second and a maximum power capacity of 550 kilowatts. It is suitable for small electric power facilities in mountainous regions.

Source: Chengdu SICHUAN RIBAO in Chinese 26 May 82 p 2

Item: Jiamusi City Combined Textile Equipment, Materials and Parts Plant  
[0163 2606 2448 1579 5114 0678 4791 4930 0892 2624 6792 0115 0617]

Location: Jiamusi, Heilongjiang, PRC

Data: This plant has successfully trial manufactured butadiene acrylonitrile rubber textile equipment, materials and accessories. Thus, Heilongjiang no longer needs to import these products. The plant has signed contracts with more than 20 textile mills for 220,000 items.

Source: Harbin HEILONGJIANG RIBAO in Chinese 27 Mar 82 p 1

Item: Harbin Oxygen Generator Plant  
[5756 1422 3453 0455 7402 2623 0617]

Location: Harbin, Heilongjiang, PRC

Data: A KL2 granulating machine that can turn sugar beet residues from the sugar-making process into pellets has been successfully trial produced at this plant. The new Chinese-made machine can process 2 metric tons of sugar beet residues per hour.

Source: Harbin HEILONGJIANG RIBAO in Chinese 23 Apr 82 p 1

Item: Shanxi Machine Tool Plant  
[1472 6007 2623 1643 0617]

Location: Taiyuan, Shanxi, PRC

Data: The petroleum drill collar trial manufactured by this plant approaches the advanced level of similar products turned out in the world. This was announced at the Taiyuan meeting held in early April 1982 to evaluate Chinese-made drill collars. An important part of the drill stem, the drill collar, is 9 meters long and weighs 1,500 kilograms.

Source: Harbin HEILONGJIANG RIBAO in Chinese 13 Apr 82 p 4

Item: Dalian Electromachinery Plant  
[1129 6647 7193 2623 0617]

Location: Dalian, Liaoning, PRC

Data: This plant, winner of a State Silver Award, is exporting a complete set of equipment and technology for a small-scale electromachinery plant. By the last 10 days of March, it has shipped out the last batch of equipment to Hong Kong for transshipment abroad. The small-scale electromachinery plant was designed on the basis of an annual output capacity of 60,000 pieces of equipment (machinery). The entire project includes 1,112 sets (pieces) of standard equipment, 131 pieces (sets) of special equipment, and 3,088 sets (parts) of technical equipment required by casting, stamping, electric motor, and tool workshops, as well as technical transfer data of 800,000 words, and the export of 70,000 electric motors, earning for the state 11.4 million U.S. dollars in foreign exchange. The export of complete sets of equipment involves 130 factories in 23 provinces and municipalities throughout the country, which are responsible for the supply of 1,112 pieces of standard equipment. "Our export of equipment and technology to foreign countries fully demonstrates the speedy advances of China's industries."

Source: Shenyang LIAONING RIBAO in Chinese 6 May 82 p 1

Item: Shenyang Plant No 6412  
[3088 7122 0362 0934 0001 1702]

Location: Shenyang, Liaoning, PRC

Data: This plant in the past primarily manufactured goods for the military. Beginning 1980, it has employed some of its equipment to turn out civilian goods including pistons and piston rings. In the past 2 years, it has produced eight different kinds of top-quality products. Heavy emphasis is placed on product quality, which has enabled the plant to find a ready market for its products. The plant has so far received orders for civilian goods from 430 customers in 19 provinces and municipalities throughout the country.

Source: Beijing RENMIN RIBAO in Chinese 8 May 82 p 3

Item: Tianguang Electrical Engineering Plant  
[1131 0342 7193 1562 0617]

Location: Lanzhou, Gansu, PRC

Data: This "outstanding" plant has been seeking ways and means to turn out new products that have a ready market. It is now making more than 30 varieties of the ECL and LSTTL integrated circuits series. The sale price of its ECL circuits has been reduced by more than 50 percent as compared to 1978.

Source: Lanzhou GANSU RIBAO in Chinese 22 Apr 82 p 1

Item: Shaanxi Province Sewing Machine Plant  
[7104 6007 4164 4911 4771 2623 0617]

Location: Xi'an, Shaanxi, PRC

Data: During the first quarter of this year, this plant produced 80,000 sewing machines, accounting for 25 percent of the annual plan and showing an increase of 13 percent over the same 1981 period.

Source: Xi'an SHAANXI RIBAO in Chinese 9 Apr 82 p 2

Item: Urumqi Storage Battery Plant  
[3527 7627 2606 7871 2606 2624 0617]

Location: Urumqi, Xinjiang, PRC

Data: Early this year, this plant has done much in reducing its production cost and increasing its economic results. During the first quarter of 1982, its production cost dropped 5.47 percent from the like 1981 period and the amount of profits delivered to the state for the first 3 months of this year exceeded the total amount of profits realized during the January-August 1981 period. The targeted production cost per 1,000 large-sized batteries was 172.7 yuan, and the production cost in January this year dropped to 170 yuan. From this item alone, the plant was able to realize an additional 10,000 yuan in profit.

Source: Beijing RENMIN RIBAO in Chinese 14 May 82 p 2

## VII. AGRICULTURAL MACHINERY INDUSTRY

Item: Songjiang Tractor Manufacturing Plant  
[2646 3068 2151 2139 2623 0455 6644 0617]

Location: Harbin, Heilongjiang, PRC

Data: The Harbin brand light-weight motorcycle manufactured by this plant has been put into production after passing an appraisal test on 21 March. This type of motorcycle with a speed of 50 kilometers per hour has gone through a test run of 10,000 kilometers in Shijiazhuang City. This plant now has the capacity to turn out 10,000 motorcycles annually.

Source: Harbin HEILONGJIANG RIBAO in Chinese 25 Mar 82 p 1

Item: Hongqi [Red Flag] Tractor Plant  
[7254 1472 4767 2475 2151 2139 2623 1681]

Location: Anshan, Liaoning, PRC

Data: This plant has successfully trial-manufactured a 150-horsepower well drilling machine with a traction force of 10 metric tons. The machine is a piece of equipment used in repairing oil wells. Those machines currently in use in the country are suitable only for work in wells of less than 2,000 meters in depth, whereas the new machines can operate in wells up to 4,000 meters in depth.

Source: Shenyang LIAONING RIBAO in Chinese 9 May 82 p 2

Item: Kunming Tractor Plant  
[2492 2494 2151 2139 2623 0617]

Location: Kunming, Yunnan, PRC

Data: In cooperation with the Yantai Mechanical (Technology) Institute of Shandong, this plant succeeded in making a low melting point alloy composite mold. This is a new mold-making technique developed in the country and it will pave the way for the manufacture of large and complicated stamping dies. The low melting point alloy mold has wide applications in the farm machinery, automobile, aircraft, instruments and meters, enamel, plastics, rubber, light and hardware industries.

Source: Kunming YUNNAN RIBAO in Chinese 28 Mar 82 p 2

Item: Shenyang City Small-Sized Tractor Plant  
[3088 7122 1579 1420 0992 2151 2139 2623 0617]

Location: Shenyang, Liaoning, PRC

Data: The small-sized four-wheel tractor successfully trial produced by this plant made its first appearance on 27 April. It comes in two types--12 and 15 horsepower. The tractor is structurally simple and has great tractive force.

Source: Shenyang LIAONING RIBAO in Chinese 29 Apr 82 p 2



Item: Xi'an Farm Machinery Plant  
[6007 1344 2570 2623 0617]

Location: Xi'an, Shaanxi Province, PRC

Data: To meet the growing demand in the rural areas, this plant has redoubled its efforts toward manufacturing more and better small-scale four-wheeled tractors. Workers here are striving to produce 1,000 small-scale four-wheeled tractors in 1982.

Source: Xi'an SHAANXI RIBAO in Chinese 21 Apr 82 p 2

VIII. MISCELLANEOUS INDUSTRIES

Item: Harbin Flax Textile Mill  
[0761 1422 0068 7802 4791 4930 1681]

Location: Harbin, Heilongjiang, PRC

Data: This mill, the largest joint flax textile enterprise in the country, has recently opened a new branch. The new branch, an extension of the old plant, is equipped with more than 460 spindles and looms, and has an annual design production capacity of 6,776 bolts and an annual output of 2 million meters of muslin. After undergoing printing or embroidery processes, the muslin can be used to make bed and table linens, curtains, slipcovers, embroidered clothing and other exportable handicraft items. Heilongjiang produces about 80 percent of the country's flax. In the past, because the plant was unable to process all of the locally produced flax, the province had to export a portion of the raw material. The opening of the new branch has expanded the plant's printing and embroidery capacity, vastly increasing the number of exportable muslin handicraft items.

Source: Harbin HEILONGJIANG RIBAO in Chinese 1 May 82 p 1

Item: Mishan Xian Textile Mill  
[1378 1472 4905 4791 4930 1681]

Location: Mishan County, Heilongjiang, PRC

Data: Following changes in disciplinary regulations, this mill's work attendance rate increased from 80 percent to 95 percent. The mill was thereby able to increase its daily production by 12 percent.

Source: Harbin HEILONGJIANG RIBAO in Chinese 22 May 82 p 1

Item: Baimashan Cement Plant  
[4101 7456 1472 3055 3136 0617]

Location: Southern suburbs of Wuhu, Anhui Province, PRC

Data: This plant, a key construction project of China's building materials industry, was officially put into operation at the end of March this year. The first phase project with an annual output capacity of 500,000 metric tons was designed and built by Chinese engineers and workers. Since trial production began in September 1981, the two production lines have been operating satisfactorily and are up to the designed requirements.

Source: Harbin HEILONGJIANG RIBAO in Chinese 23 Apr 82 p 4

Item: Ningguo Cement Plant  
[1337 0948 3055 3136 0617]

Location: Anhui Province, PRC

Data: Preparations for the construction of this project, one of the largest cement plants in China, are underway. Special purpose wharves, highways and other facilities have been completed. The designed annual output capacity is 1.5 million metric tons of Cement 500 or higher grades of cement.

Source: Beijing RENMIN RIBAO in Chinese 24 Apr 82 p 1

Item: Yongan Cement Plant  
[3057 1344 3055 3136 0617]

Location: Yongan County, Fujian, PRC

Data: Upon approval of the State Planning Commission and the Fujian Provincial Government, this plant, the largest cement production enterprise in Fujian, has begun an expansion project. When this project is completed, the plant's annual cement output capacity will increase from 470,000 to 800,000 metric tons. The cost of this project is estimated to be 65 million yuan and it is scheduled for completion by 1985.

Source: Fuzhou FUJIAN RIBAO in Chinese 25 Apr 82 p 1

Item: Qiqihar Sugar Mill  
[7871 7871 0761 1422 4743 1681]

Location: Qiqihar City, Heilongjiang, PRC

Data: This mill has installed a new power station with a generating capacity of 3,000 kilowatts. The mill is self-sufficient in the electric power it uses in refining sugar, and the power station utilizes the residual heat from that refining process. The power station has an annual generating capacity of 7.5 million kilowatt hours. It will save the mill over 3,600 metric tons of coal, and thereby reduce the mill's fuel costs by 300,000 yuan.

Source: Harbin HEILONGJIANG RIBAO in Chinese 20 May 82 p 1

Item: Harbin City Dairy Processing Plant No 3  
[0761 1422 3203 1579 4574 0005 0500 0455 0756 1681]

Location: Harbin, Heilongjiang, PRC

Data: This new plant was financed through a 340,000 yuan investment by the provincial and municipal departments concerned. It covers 800 square meters, and is equipped with freezing, pasteurizing, and laboratory testing facilities. With a five-step production process (testing, filtering, pasteurizing, cooling and bottling) for fresh milk, the plant has a processing capacity of over 15,000 cattles per day. In the past, because of both insufficient processing capacity and marketing difficulties encountered by local dairy farms, there was no pasteurized fresh milk available in the area. With the construction of this new plant, a new schedule was set for increasing the number of cows available for milking. This number has already grown from 257 to 395 dairy cows.

Source: Harbin HEILONGJIANG RIBAO in Chinese 1 May 82 p 1

Item: Xiangfang Food Processing Plant  
[7449 0972 8037 7380 0502 1562 0617]

Location: Harbin City, Heilongjiang, PRC

Data: Heilongjiang's largest bread production line, with a daily output of 10 metric tons, was put into operation here on 4 May. Equipped with machinery designed and installed by local engineers, the new production line is semi-automatic.

Source: Harbin HEILONGJIANG RIBAO in Chinese 11 May 82 p 1

Item: Xi'an Plastics Plant  
[6007 1344 1043 2436 1681]

Location: Xi'an, Shaanxi, PRC

Data: This plant has been trying to meet the steadily increasing demand of rural commune production teams of plastic sheets for farm use. However, polyethylene--the raw material used in making the plastic sheets--is in short supply. As a result, the plant restored production of polyvinyl chloride sheets, which are of high strength and excellent transparency. By the end of February, it had already produced more than 280 metric tons of plastic sheets, a 150 percent increase over production in the same period last year.

Source: Xi'an SHAANXI RIBAO in Chinese 14 Mar 82 p 1

Item: Sihui Gypsum Mine  
[0934 2585 4258 5221 4349]

Location: Sihui County, Guangdong, PRC

Data: This mine, jointly run by Sihui County and Zhaoqing Prefecture and the largest of its kind in Guangdong Province, has started operations. By 20 April, it has produced 9,500 metric tons of gypsum. The mine, with an estimated reserve of 90 million metric tons, is located near Bei Jiang (North River) and the northern section of the Guanghai Highway, facilitating transportation of its products.

Source: Guangzhou NANFANG RIBAO in Chinese 23 Apr 82 p 1

Item: Mudanjiang Lime Plant  
[3665 0030 3068 4258 3500 1681]

Location: Mudanjiang, Heilongjiang, PRC

Data: On 5 March this plant began mass production of carbon dioxide. The substance can be used in steel casting, soft drink and medicine manufacture, medical treatment and scientific research. In the past, Mudanjiang relied completely on external sources for its carbon dioxide supply. At this point the plant has already developed a production capacity of 300 metric tons per year.

Source: Harbin HEILONGJIANG RIBAO in Chinese 12 Mar 82 p 1

Item: Tianchu Monosodium Glutamate Plant  
[1131 1674 0724 4737 0617]

Location: Shanghai, PRC

Data: This plant has achieved marked results in applying electronic computers to control the fermentation process in monosodium glutamate production. The Shanghai Industrial Automated Instruments and Meters Institute, the Shanghai Light Industry Design Institute, and this plant organized a team to study the applications of micro-computer system in controlling a 50-cubic-meter fermentation tank and officially put it into operation in September 1981. Controlled by Chinese-made computers, one fermentation tank can produce an additional 213 kilograms of monosodium glutamate, averaging a monthly increase of 3 metric tons.

Source: Beijing RENMIN RIBAO in Chinese 14 May 82 p 2

Item: Tao'an Wool (strip) Mill  
[3165 1344 3029 2742 0617]

Location: Tao'an County, Jilin, PRC

Data: This modern enterprise was recently established here. The mill covers an area of 34,410 square meters and will be put into operation on 1 July. Its capacity is 1,000 metric tons of pure wool strip and 1,000 metric tons of washed wool, which can be used for 15,000 worsted spinning spindles.

Source: Changchun Jilin Provincial Service in Mandarin 2200 GMT 28 Apr 82 SK

Item: Xi'an Rubber Products Plant No 1  
[6007 1344 2895 5231 0455 0756 0001 0617]

Location: Xi'an, Shaanxi, PRC

Data: Effective 8 April 1982, this plant has been renamed the Xi'an Rubber Hose Plant [6007 1344 5231 4619 0617].

Source: Xi'an SHAANXI RIBAO in Chinese 13 Apr 82 p 4



Item: Qinggang Xian Bottle Plant  
[7230 1471 4905 0455 0617]

Location: Qinggang County, Heilongjiang, PRC

Data: This plant has recently put into operation a beer bottle production line with an annual capacity of 6 million bottles. On 30 March this year, it also put into operation a newly built production line capable of turning out 4 million soft drink, wine, and mineral water bottles. Heilongjiang's present beer output capacity is 140,000 metric tons, ranking first in the country.

Source: Harbin HEILONGJIANG RIBAO in Chinese 22 Mar 82 p 1

Item: Daqing Brewery  
[2192 1987 0802 6794 0617]

Location: Daqing, Heilongjiang, PRC

Data: Groundbreaking for this brewery took place 22 March 1982, and the project is scheduled for completion at the end of this year. Covering 9,700 square meters of floor space, this brewery will have a designed annual beer output capacity of 10,000 metric tons.

Source: Harbin HEILONGJIANG RIBAO in Chinese 23 Mar 82 p 1

IX. PHOTOGRAPHS OF INDUSTRIAL FACILITIES

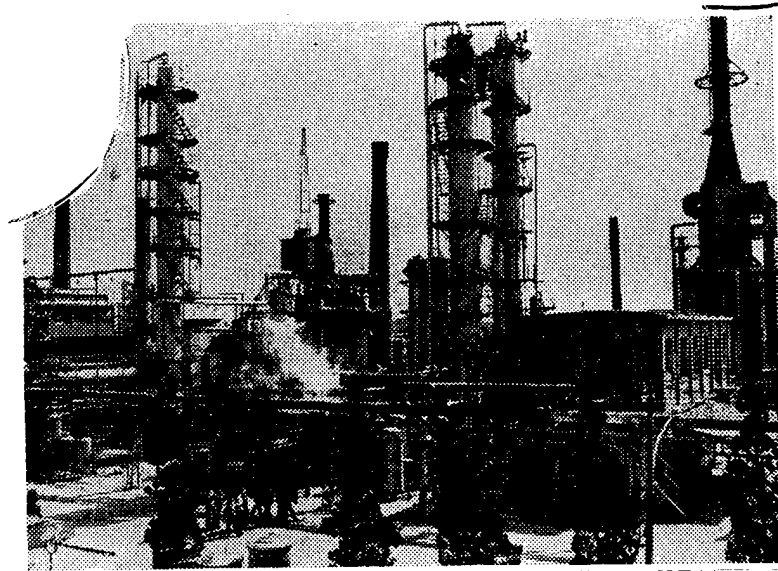


Fig. 1 External view of a refining workshop of the Hangzhou Oil Refinery

[Source: Hangzhou ZHEJIANG RIBAO in Chinese 15 Apr 82 p 1]



Fig. 2 Frame and base for a 4,500-meter deep well drill rig built by the Baoji Petroleum Machinery Plant. The rig has been operating in the Yumen, Nanyang, Dagang and Dongpu oilfields since the beginning of 1981  
 [Source: Beijing RENMIN RIBAO in Chinese 19 May 82 p 1]

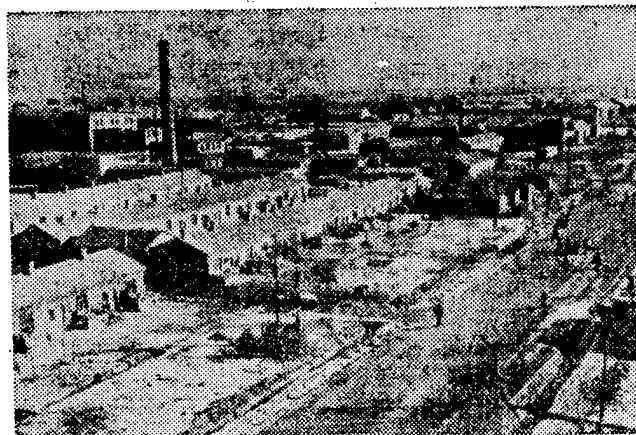


Fig. 3 A view of Putaohua, a small town in the Daqing Oilfield  
 [Source: Harbin HEILONGJIANG RIBAO in Chinese 25 Mar 82 p 2]

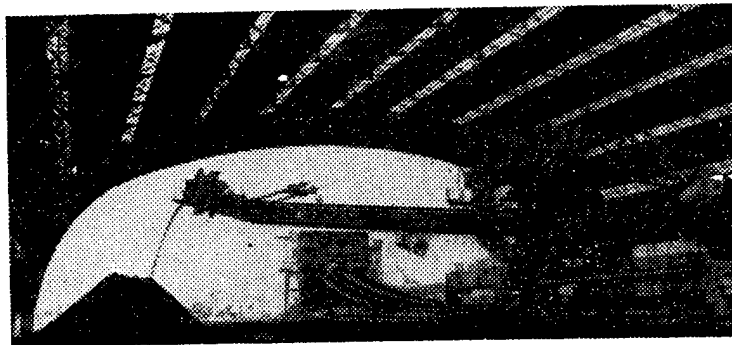


Fig. 4 China's largest indoor coal yard has recently been completed and put into operation at the Baoshan Iron and Steel Mill. It can store 24,000 metric tons of coal.

[Source: Shanghai JIEFANG RIBAO in Chinese 5 May 82 p 1]

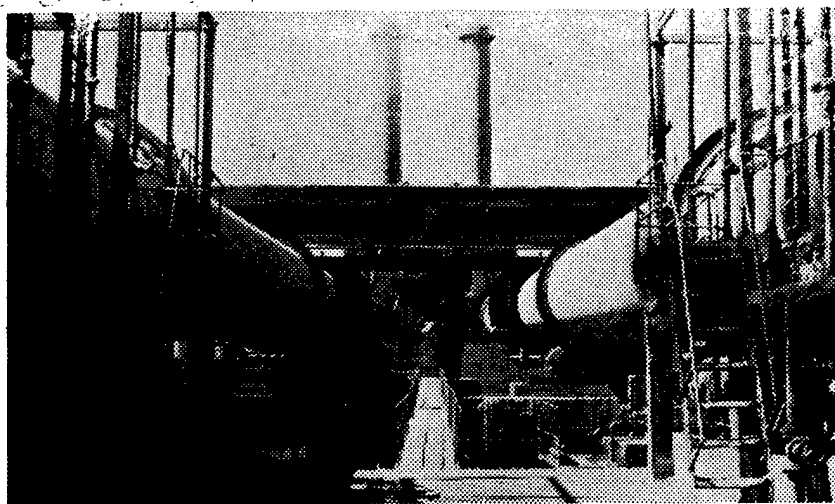


Fig. 5 Photograph shows large rotary kilns in operation at the Shuicheng Cement Plant in Liupanshui of western Guizhou

[Source: Beijing RENMIN RIBAO in Chinese 9 May 82 p 8]

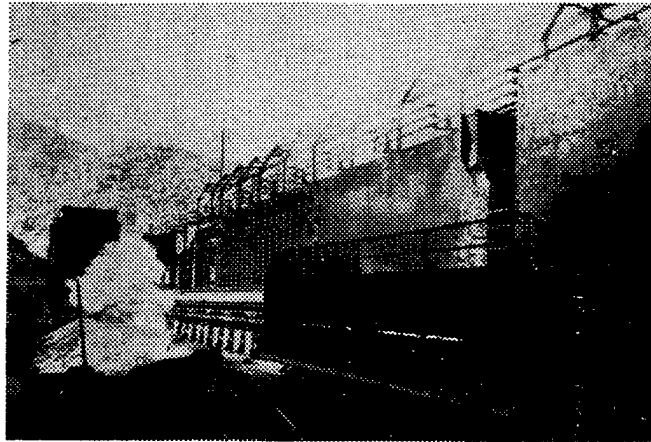


Fig. 6 A coking plant of the Shuicheng Iron and Steel Mill in Liupanshui, Guizhou

[Source: Beijing RENMIN RIBAO in Chinese 9 May 82 p 8]

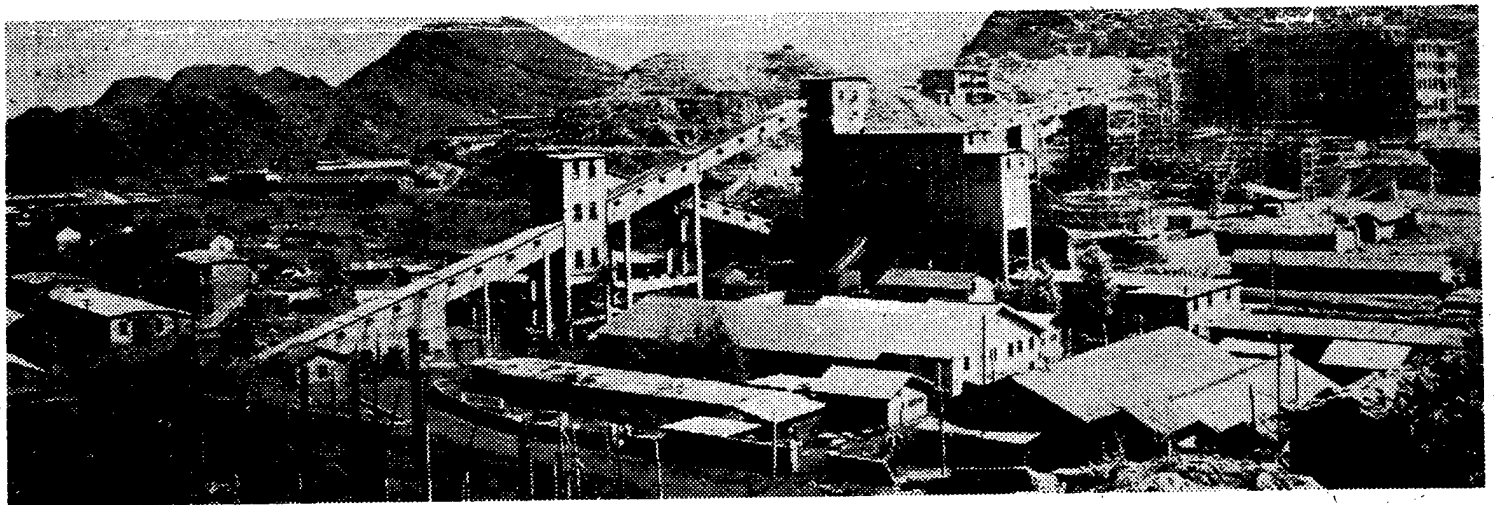


Fig. 7 Full view of the Dizong Coal Mine under the Liuzhi Mining Administrative Bureau in Liupanshui, Guizhou

[Source: Beijing RENMIN RIBAO in Chinese 9 May 82 p 8]

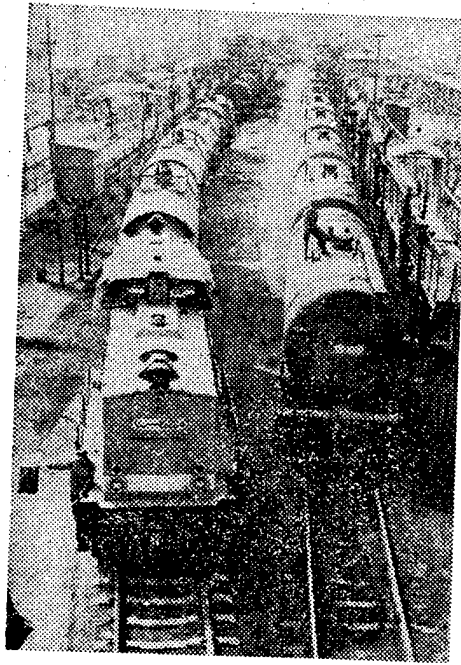


Fig. 8 A view of the Jinxi Petroleum Plant No 5 in Liaoning Province

[Source: Shenyang LIAONING RIBAO in Chinese 4 May 82 p 2]

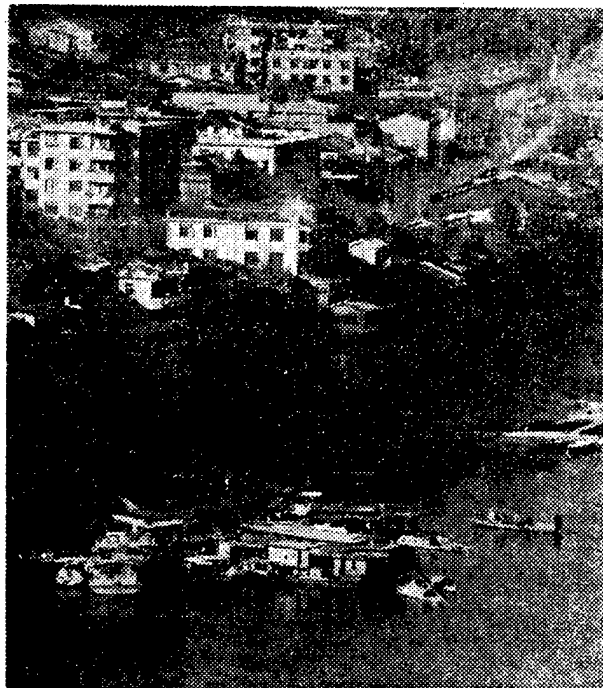


Fig. 9 Yanfumen Wharf in Nanping, Fujian Province

[Source: Beijing GONGREN RIBAO in Chinese 18 Apr 82 p 4]

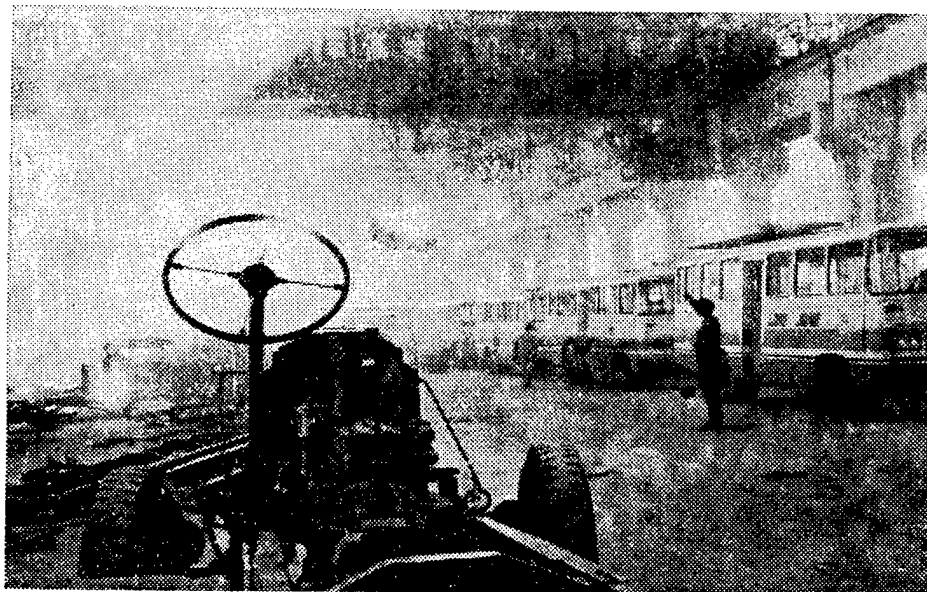


Fig. 10 A new assembly workshop of the Heilongjiang Bus Plant

[Source: Beijing GONGREN RIBAO in Chinese 17 Apr 82 p 1]

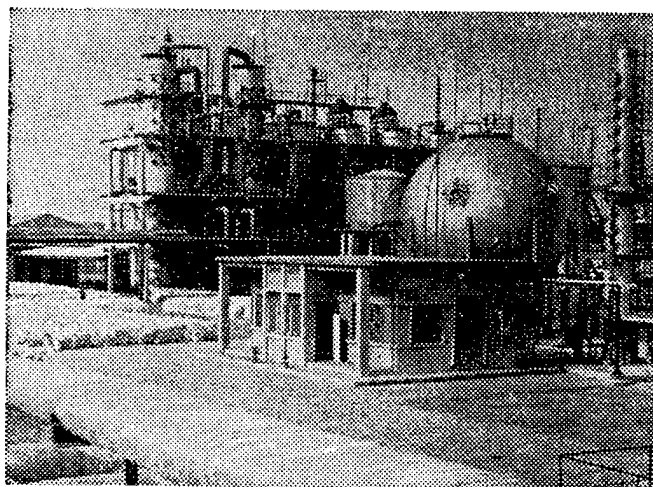


Fig. 11 A section of the Jiangxi Ammonia Plant

[Source: Beijing GUANGMING RIBAO in Chinese 3 May 82 p 1]

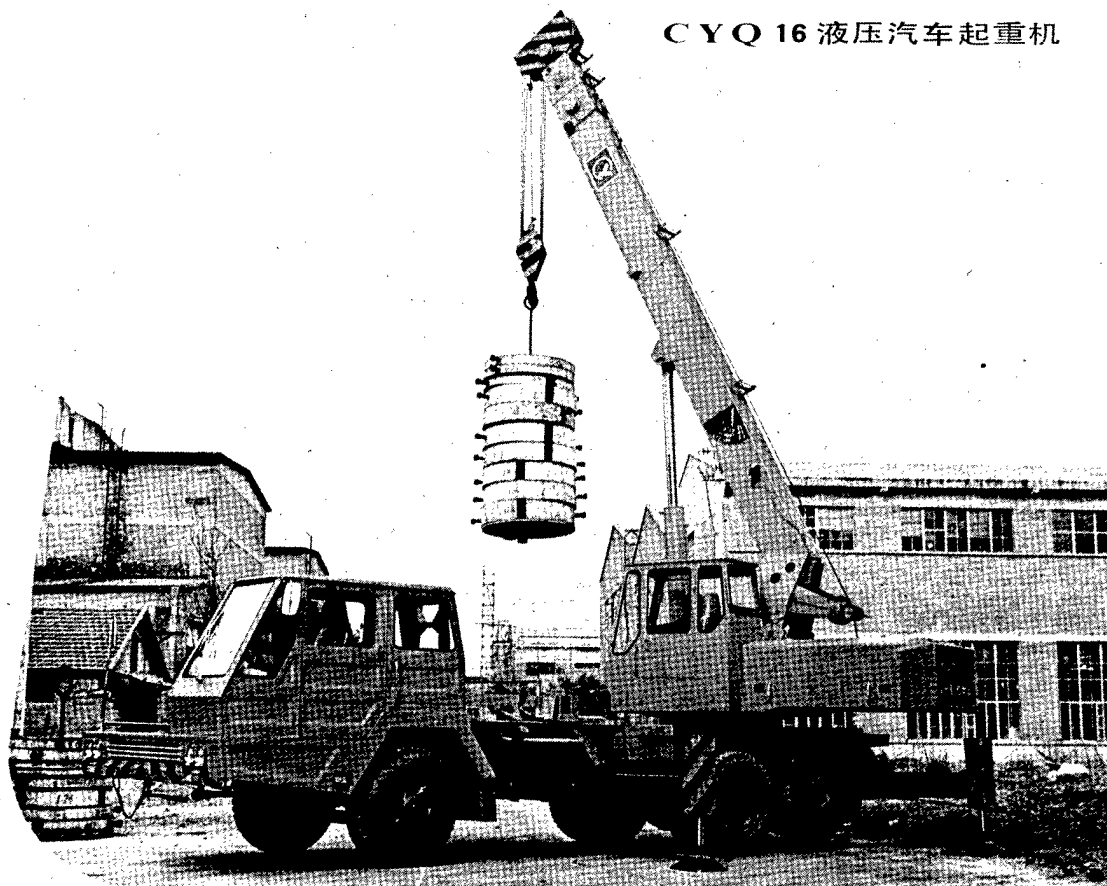


Fig. 12 Photo of a CYQ 16 hydraulic truck crane built by the Changzhou Metallurgical Machinery Plant in Jiangsu

[Source: Beijing QIZHONG YUNSHU JIXIE [HOISTS AND CONVEYANCES] in Chinese No 4, 1982 inside backcover]



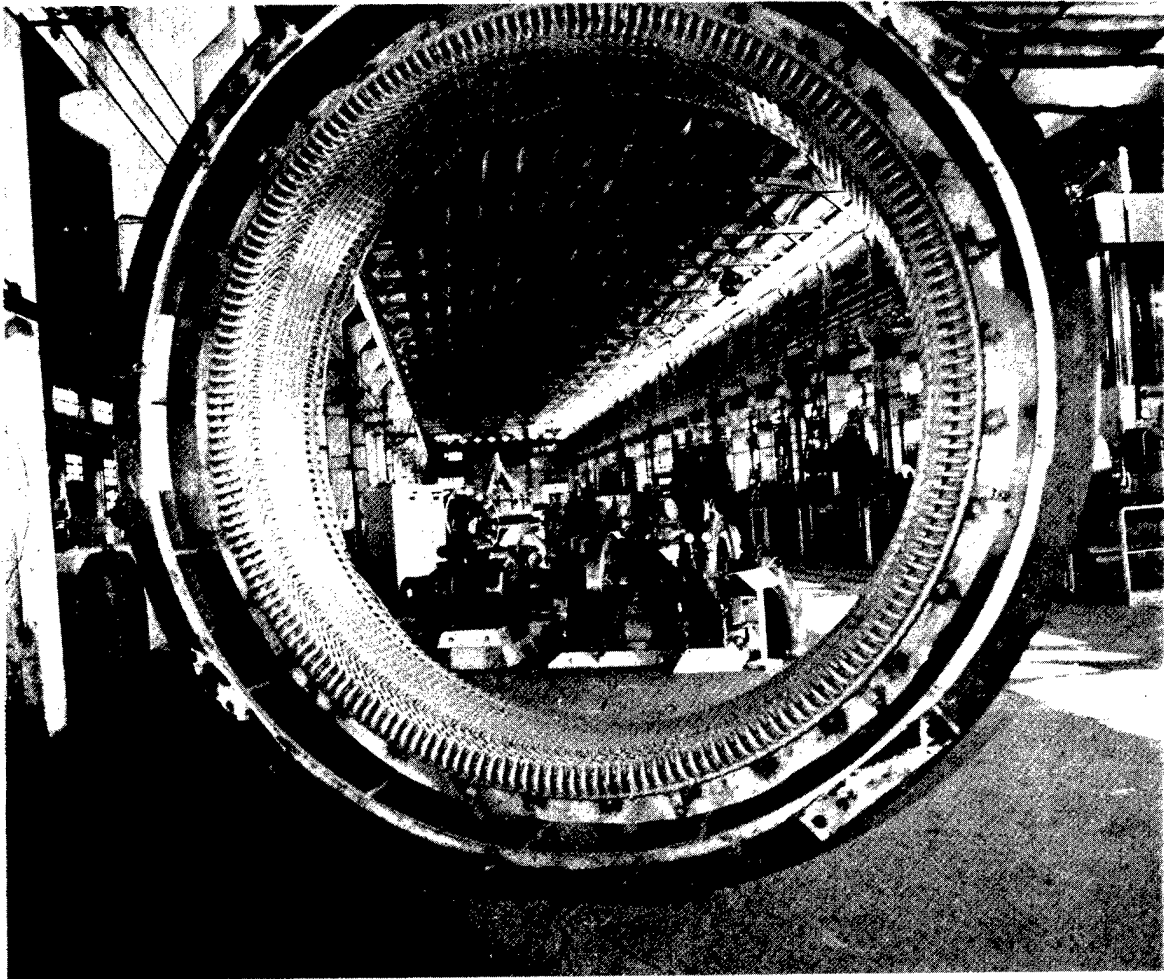


Fig. 13 Inside view of the Nanping Electromachinery Plant in Fujian. This plant is a major turbo-pump manufacturer in China

[Source: Fuzhou FUJIAN HUABAO [FUJIAN PICTORIAL] in Chinese No 2, 1982 p 2]

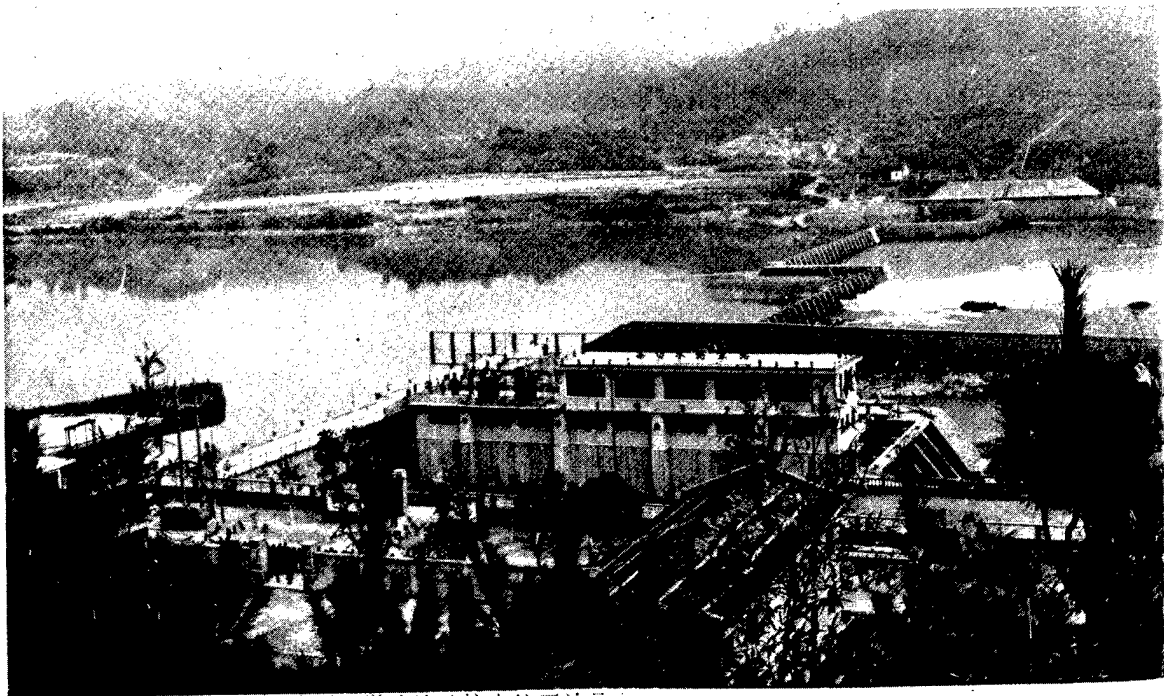


Fig. 14 Photo of the Yefang Turbopump Station operated by the Xudun Commune in Jian'ou, Fujian. The station has a lift of 36 meters and can irrigate 5,500 mu of land. Its annual power output is 10 million kilowatt hours

[Source: Fuzhou FUJIAN HUABAO [FUJIAN PICTORIAL] in Chinese No 2, 1982 p 2]

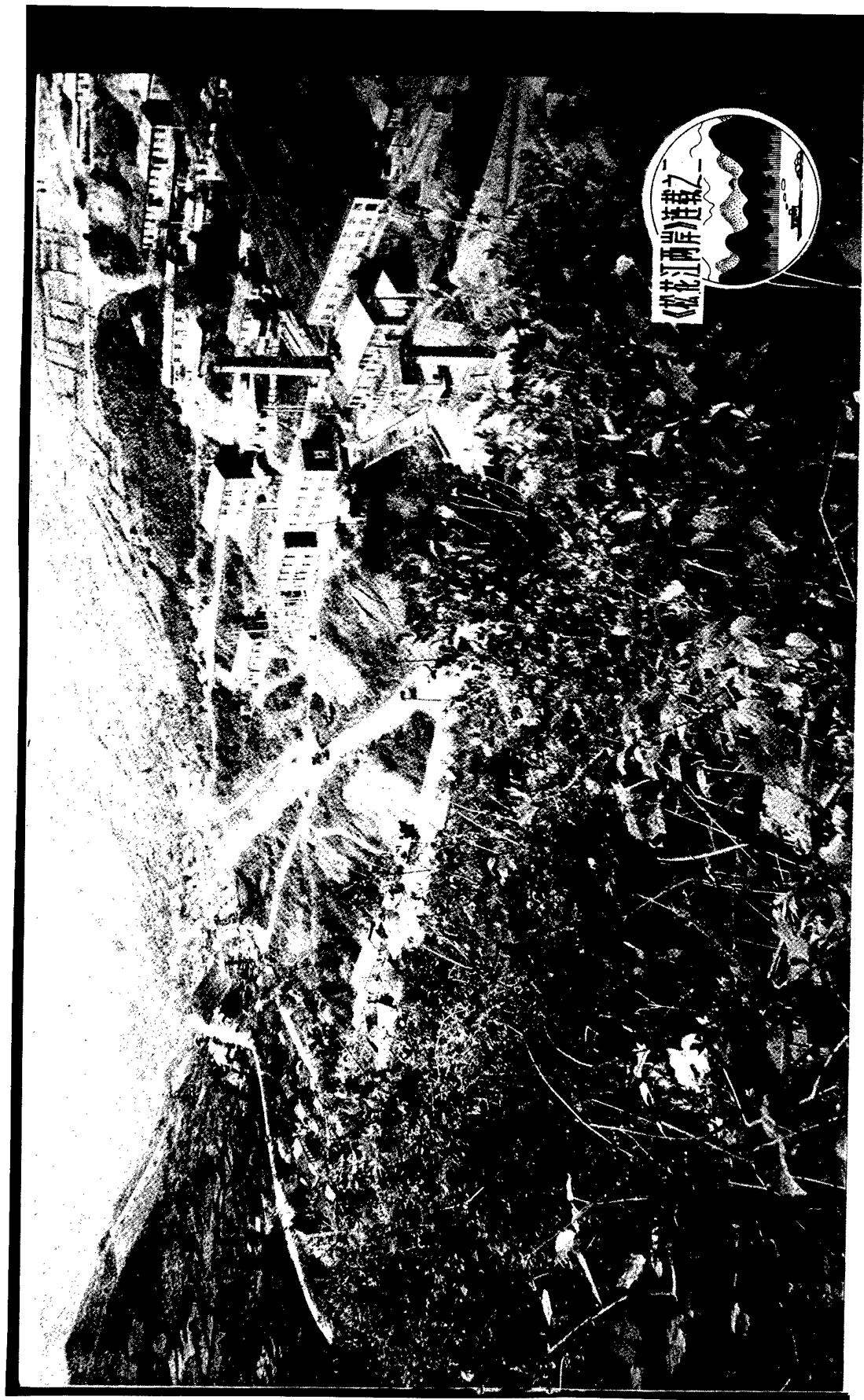


Fig. 15 A view of the 160-year Jiapigou Gold Mine along the upper reaches of the Dier Sunghua Jiang River in Heilongjiang. Large-scale development projects are underway here.

[Source: Changchun JILIN HUABAO [JILIN PICTORIAL] in Chinese No 2, 1982 p 8]

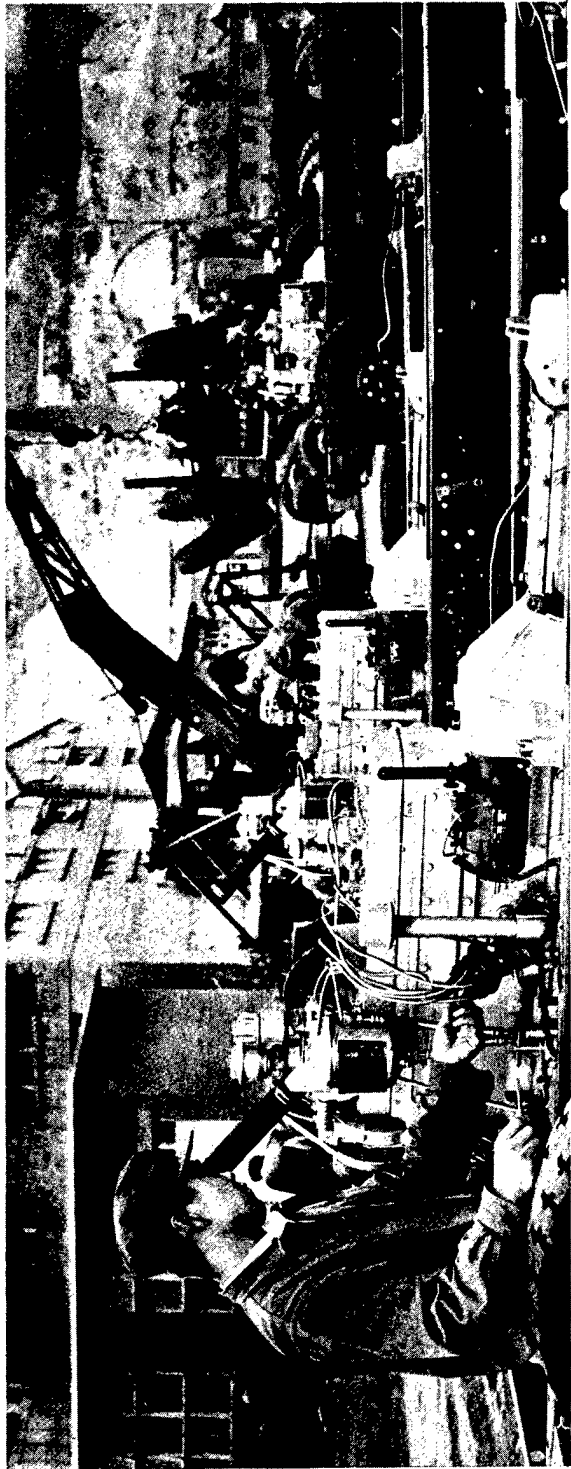


Fig. 16 Workers of the Lanzhou Bus Assembly Plant are inspecting the near-completion  
bus chassis

[Source: Lanzhou GANSU HUABAO [GANSU PICTORIAL] in Chinese No 2, 1982 p 4]



Fig. 17 Photo of the Kunming Solar Energy Equipment and Machinery Plant  
in Yunnan Province

[Source: Kunming YUNNAN HUABAO [YUNNAN PICTORIAL] in Chinese No 3, 1982 p 8]

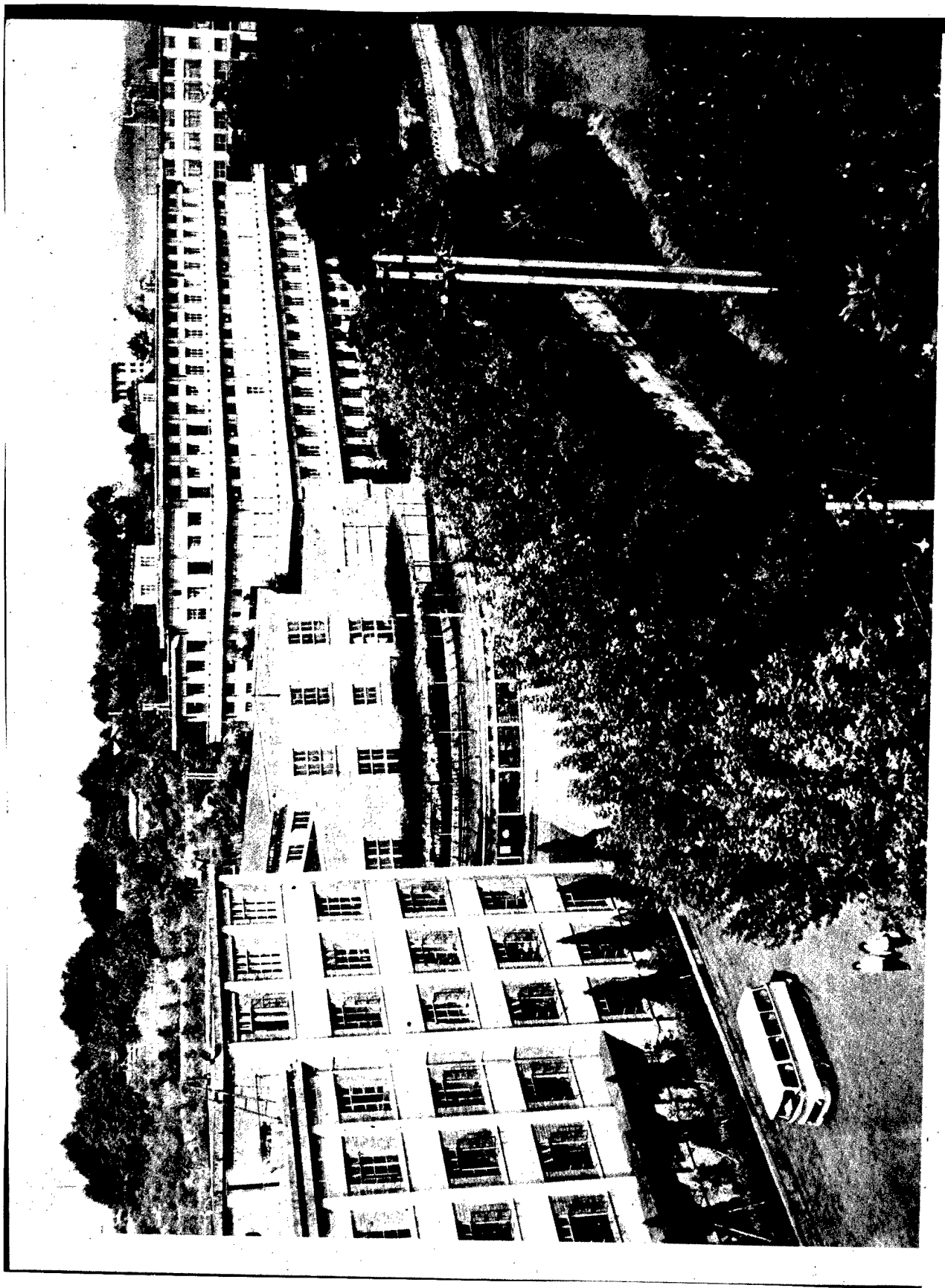


Fig. 18 View of the Changzheng Pharmaceuticals Plant in Leshan, Yunnan. The plant produces antibiotic raw materials.

[Source: Chengdu SICHUAN HUABAO [SICHUAN PICTORIAL] in Chinese No 2, 1982 p 32]

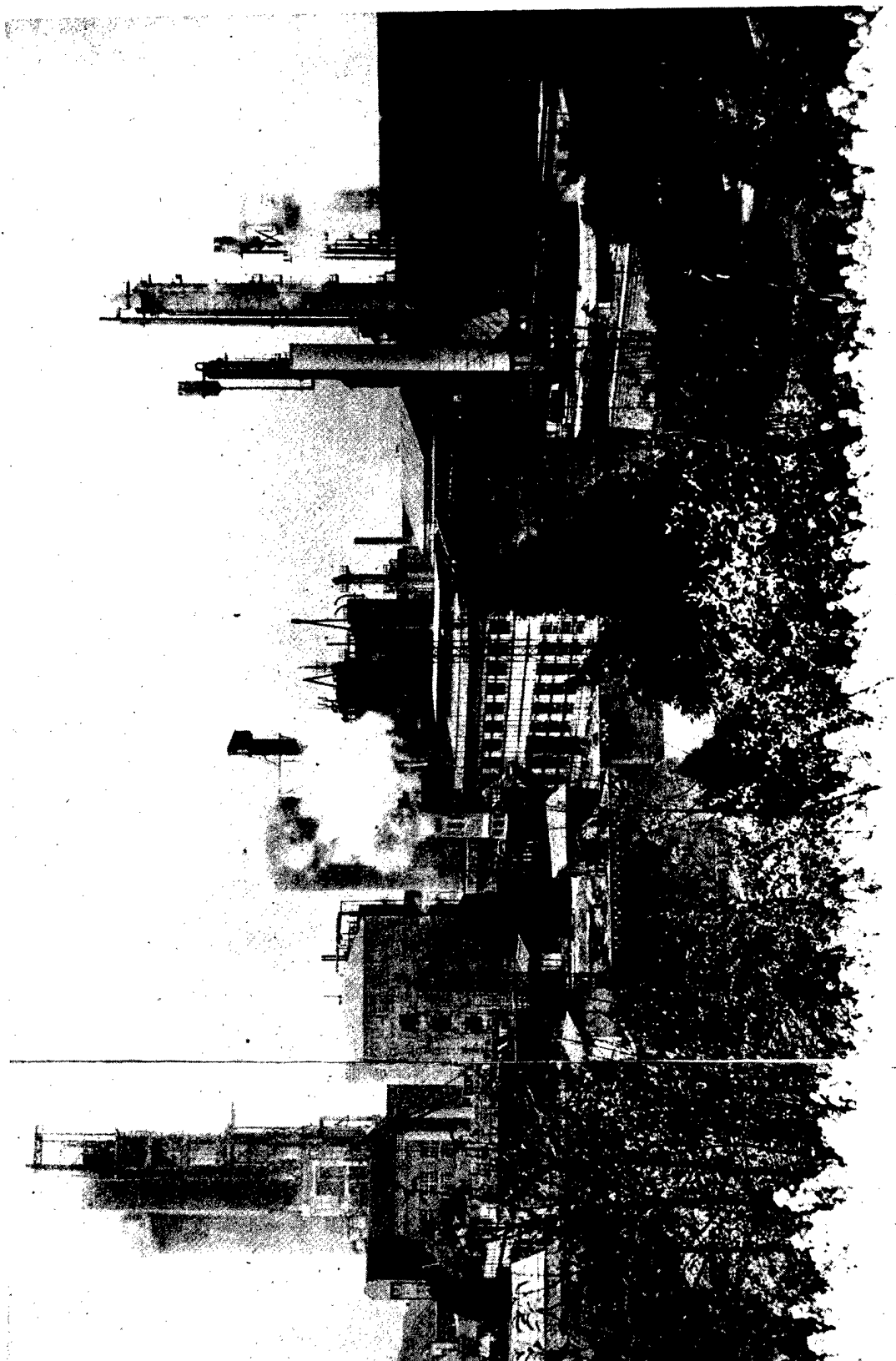
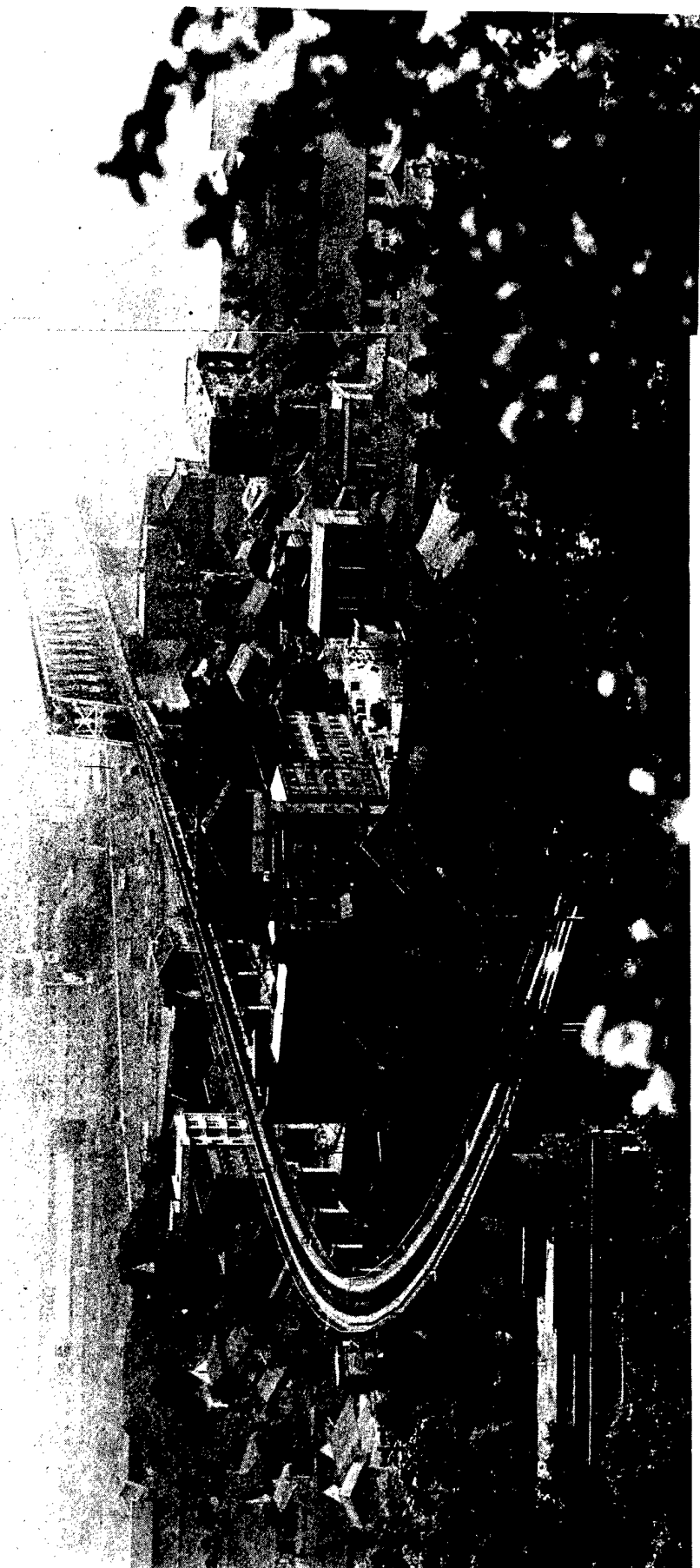


Fig. 19 A view of the Luzhou National Gas Chemicals Plant in Sichuan

[Source: Chengdu SICHUAN HUABAO [SICHUAN PICTORIAL] in Chinese No 2, 1982 pp 27-28]



地区首府宜宾市，高楼四起景象更新。

Fig. 20 Photograph of the "industrial" city of Yibin in Sichuan Province

[Source: Chengdu SICHUAN HUABAO [SICHUAN PICTORIAL] in Chinese No 2, 1982 pp 27-28]



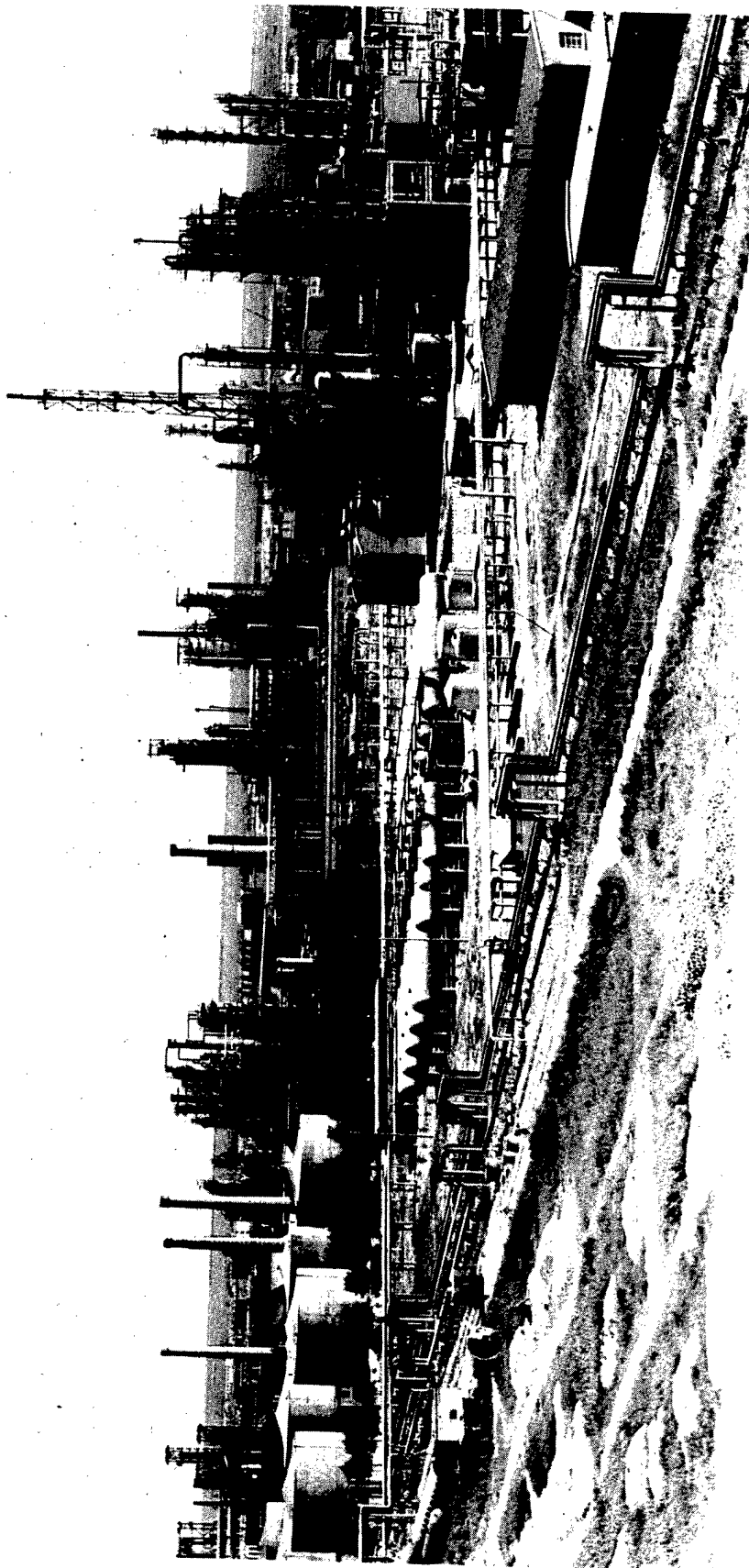


Fig. 21 A section of the Daqing General Petrochemical Plant in Heilongjiang

[Source of photograph unidentified]